

Staff Public Workshop #3: First Revised Draft of the Toxicity Provisions

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August 28, 2019

Email questions to DWQ-IPSI@waterboards.ca.gov

Purpose of the Workshop

1. Facilitate discussion among stakeholders on remaining issues and try to find areas of agreement
2. Follow up with other points from prior workshops

3 Issues with Options for Discussion

1. Determining which dischargers will have effluent limitations and monitoring requirements for chronic toxicity
2. Reasonable Potential Analysis (RPA)
3. *Ceriodaphnia dubia* chronic reproduction tests

1. Determining which dischargers will have effluent limitations and monitoring requirements for chronic toxicity

October 2018 (*IV.B.2.c.i, pg. 14*)

- POTWs that discharge at a rate ≥ 5 MGD are not required to do RPA and have required chronic toxicity effluent limitations and monitoring requirements
- All other non-storm water NPDES dischargers must do RPA to determine if they have RP and are subject to effluent limitations and routine monitoring

Public Comments

- No RPA for chronic toxicity and all non-storm water NPDES dischargers have chronic effluent limitations and routine monitoring
- All non-storm water NPDES dischargers should be allowed to do RPA prior to receiving effluent limitations and routine monitoring

1. Determining which dischargers will have effluent limitations and monitoring requirements for chronic toxicity

Option #1

- No change; establish chronic effluent limitations and monitoring requirements for POTWs ≥ 5 MGD and require RPA for non-POTWs and POTWs < 5 MGD

Option #2

- Establish chronic effluent limitations and monitoring requirements for all non-storm water NPDES dischargers

Option #3

- Require chronic RPA to determine effluent limitations and monitoring requirements for all non-storm water dischargers

Option #	POTWs \geq 5 MGD (n=81)	POTWs $<$ 5 MGD (n=109)	Industrial (n=135)
1	Effluent Limitations and Routine Monitoring	RP Analysis	RP Analysis
2	Effluent Limitations and Routine Monitoring	Effluent Limitations and Routine Monitoring	Effluent Limitations and Routine Monitoring
3	RP Analysis	RP Analysis	RP Analysis

2. Reasonable Potential Analysis (RPA)

October 2018 (IV.B.2.c.iii, pg. 15)

- RP exists if any chronic or acute toxicity tests = “fail” at the IWC or percent effect is > 10%
 - Use toxicity test data within five years of permit issuance, reissuance, reopening; minimum of four tests using Table 1 species, conduct at the IWC, analyze using the TST

Public Comments

- Determine chronic and acute RP with “pass” and “fail” data
 - Any toxicity test resulting in a “fail” would result in RP
- Determine chronic and acute RP with a different percent effect threshold
 - Examples: average percent effect, 15%, 20%

2. Reasonable Potential Analysis (RPA)

Option #1

- No change; determine RP on any “fail” at the IWC or a percent effect > 10%

Option #2

- Determine RP on any “fail” at the IWC or a higher percent effect
 - Examples: 15% or 20%

Option #3

- Determine RP solely on any “fail” at the IWC

3. *Ceriodaphnia dubia* Chronic Reproduction Test

October 2018 (IV.B.1.b, pg. 6)

- *C. dubia*, when identified as the most sensitive species, should be used to determine compliance with chronic toxicity effluent limitations

Public Comments:

- Remove the *C. dubia* chronic reproduction test from Table 1
- Do not use *C. dubia* as the most sensitive species until:
 - *C. dubia* reproductive test methods for chronic toxicity are re-evaluated to verify the accuracy of the test, or
 - Improvements can be made to increase the accuracy and reduce interlaboratory variability

3. *Ceriodaphnia dubia* Chronic Reproduction Test

Option #1

- No change; use *C. dubia* to assess compliance with effluent limitations
- Conduct a study to determine sources of lab variability and whether any refinements to the method or the use of *C. dubia* are needed

Option #2

- Use *C. dubia* as a monitoring/TRE trigger but not for compliance and use the second most sensitive species to assess compliance
- Include a date in Provisions when *C. dubia* would be used again for compliance with (new?) effluent limitations to incentivize completing the study timely

Option #3

- Do not use *C. dubia* as a monitoring/TRE trigger or for compliance with (new?) effluent limitations until the end of the study or until a specified future date

General Principles of the *C. dubia* Study

- Goal is to conduct a study to determine sources of lab variability and whether any refinements to the method are needed
- *C. dubia* chronic reproduction test method has been used in California WET testing for several decades
 - A number of California labs are achieving the < 5% false positive rate through good precision and/or increased replicates
- Multi-stakeholder framing of scope, along with nationally recognized independent experts
- Cost share across the stakeholder community
- Incentivize timely completion of the study

4. Species Sensitivity Screening (SSS) Frequency

October 2018 (IV.B.2.a, pg. 12)

- SSS is required either prior to, or within 18 months after the first issuance, reissuance, renewal, or reopening of any NPDES permit (and any subsequent) after the effective date of the Provisions
 - Minimum = once every 10 years

July 2019 (IV.B.2.a, pg. 13)

- No change regarding when SSS is required
- Added clarifying language to allow the use of SSS data generated prior to the effective date of the Provisions only if the tests were conducted using the same protocols established by the Provisions

5. Reasonable Potential Analysis (RPA): Acute Toxicity

October 2018 (IV.B.2.b.ii, pg. 14)

- The Permitting Authority determines which POTWs are required to conduct RPA for acute toxicity
- All other non-storm water NPDES dischargers are required to conduct a RPA for acute toxicity

July 2019 (IV.B.2.b.ii, pg. 17)

- The Permitting Authority determines when a discharger is required to conduct RPA for acute toxicity

6. Reduced Monitoring Frequency Eligibility

October 2018 (IV.B.2.c.i(B), pg. 17)

- The Permitting Authority may reduce a discharger's chronic toxicity routine monitoring, if, for the prior five consecutive years, these conditions have been met:
 1. No MDEL or MMEL violations
 2. The Provisions in the applicable NPDES permit(s) have been followed

July 2019 (IV.B.2.c.i(B), pg. 21)

- Provide an additional option for dischargers without an existing MDEL and MMEL to be eligible for a reduced monitoring frequency if:
 1. Toxicity requirements in the NPDES permit(s) have been followed
 2. Use the TST to analyze all toxicity test data collected within the past five years
 - Minimum = 10 tests
 3. No "fails" at the IWC

7. Reduced Monitoring Frequency During a Toxicity Reduction Evaluation (TRE)

October 2018 (IV.B.2.c.i(B), pg. 18)

- The Permitting Authority may grant a temporary reduced monitoring frequency during a TRE
 - Minimum = 2 chronic tests per year
- Must return to regular schedule within one year or when TRE is complete (whichever comes first)

July 2019 (IV.B.2.c.i(B), pg. 22)

- Add a qualification that reduced monitoring frequency is only allowed when toxicity testing will be conducted as part of the TRE

Other Points from Prior Workshops (should time allow)

- Applicability of toxicity requirements to regional general permits
- CIWQS and use of the calendar month
- *Hyaella azteca* test species
- Flexibility of dilution water hardness
- 12 toxicity tests required in a year

Other Points from Prior Workshops (should time allow)

Staff is considering the following:

- Allowances to retest for reasons outside the discharger's control
- Monitoring frequency requirements for limited discharges
- Applicability of species for inland saline waters

Project Timeline

August 13, 2019

First Staff Public Workshop

August 16, 2019

Second Staff Public Workshop

August 28, 2019

Third Staff Public Workshop

October 3, 2019

Public Board Workshop

Fall 2019

Release of Response to Comments

December 2019

State Water Board Consideration (Tentative)

Contacts

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Documents & Additional Information Available at:
https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.html



Questions?